

EXHIBIT 5

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COMPUTER DICTIONARY



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memory allocated at the beginning of a program and remaining invariant in size throughout execution; static RAM is fast random access memory that draws power and stores information in circuits called flip-flops but that does not have to be refreshed at frequent intervals as does dynamic RAM commonly included in personal computers: a static image is one that changes infrequently while an application is being used (such as a window border). In computing, the opposite of static is *dynamic*—ever-changing. *Compare* dynamic.

static allocation Allocation of memory that occurs usually when the program starts. This memory remains allocated during the program's execution and is not deallocated until the program is ended. *Compare* dynamic allocation; *see also* deallocate.

static binding Also called early binding. Binding of referring symbolic addresses in the program to object-related addresses that occurs during program compilation or linkage. Most traditional programming languages rely on static binding. For example, after binding, when a variable or subroutine is called (in ALGOL, C, FORTRAN, Pascal, and so on), the program does not have to take the time to calculate the address of the variable or subroutine because it has already been inserted into the program code; the binding does not depend on the execution of the program. *Compare* dynamic binding.

static electricity An electrical charge accumulated on an object, called *static* because there is no flow of electrons in a circuit. Static charges can reach levels of 1000 volts or more but are generally harmless to people because the currents involved are small. (Damage to living tissue is caused by the combination of voltage and current, not voltage alone.) The discharge of static electricity through an electronic circuit, however, often damages the circuit because most integrated circuits are rated for maximum voltages far lower than those present in static charges.

static RAM Abbreviated SRAM (pronounced "ess-ram"). A form of semiconductor memory (RAM). Static RAM storage is based on the logic circuit

known as a flip-flop, which retains the information stored in it as long as there is enough power to run the device. A static RAM chip can store only about one-fourth as much data as a dynamic RAM chip of the same complexity, but static RAM does not require refreshing and is usually much faster than dynamic RAM. It is also more expensive. Static RAMs are usually reserved for use in caches. *Compare* dynamic RAM; *see also* RAM.

statistical multiplexer A multiplexing device that adds "intelligence" to time-division multiplexing by using buffering (temporary storage) and a microprocessor, both to combine separate transmission streams into a single signal and to allocate available bandwidth dynamically (on an ongoing basis) to make efficient use of the communications channel.

statistics The branch of mathematics that deals with the relationships among and between groups of measurements, and with the relevance of similarities and differences in those relationships. *See also* probability.

stat mux *See* statistical multiplexer.

status Also called *state*. The condition at a particular time of any of numerous elements of computing—a device, a communications channel, a network station, a program, a bit, a byte, and so on. *Status* is used in various ways to report on or to control computer operations. Application programs, for example, often use status lines to display messages for the user. Internally, programs also rely on specified bits, bytes, or registers to hold information or to record the outcome of an operation. All types of hardware use external lights, code numbers, or beeps to report on device activity or availability—for example, a light on the keyboard that is turned on when the Caps Lock key is pressed, or a number, light, beep, or message on a printer that indicates the device is on line, off line, or disabled by a paper jam.

stepper motor A mechanical device that rotates only a fixed distance each time it receives an electrical pulse. Stepper motors are used in some disk drives to move the actuator arm holding the read/write heads.

step-rate time The time required to move a disk



including the ASCII character set, the RS-232-C standard, the SCSI interface, and ANSI-standard programming languages, such as C and FORTRAN. *See also* ANSI, convention.

standard deviation In statistics, a measure of the dispersion of a group of measurements relative to the mean (average) of that group.

standard function A function that is (or should be) always available within a particular programming language—for example, *WriteLn()* in Pascal or *printf()* in C. *See also* function.

standard interface A methodology or a device that conforms to accepted guidelines.

star-dot-star (*.*) A file specification using the asterisk wildcard that means “any combination of filename and extension” in operating systems such as MS-DOS. *See also* asterisk, wildcard character.

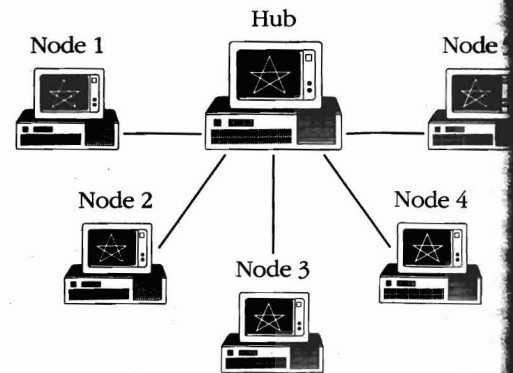
star network A local area network in which each device (node) is connected to a central computer in a star-shaped configuration (topology); commonly, a network consisting of a central computer (the hub) surrounded by terminals. *See the illustration.* In a star network, messages pass directly from a node to the central computer, which handles any further routing (as to another node) that might be necessary. A star network is reliable in the sense that a node can fail without affecting any other node on the network. Its weakness, however, is that failure of the central computer results in a shut-down of the entire network. And because each node is individually wired to the hub, cabling costs can be high. *Compare* bus network, ring network.

start bit In asynchronous transmission, the bit that signals the beginning of a character.

start/stop transmission *See* asynchronous transmission.

startup *See* boot.

startup application On the Apple Macintosh, the application program that takes control of the system when the computer is turned on. Normally, the Finder (or MultiFinder) is the startup application, but a different startup application can be designated through the Set Startup command on the Finder's Special menu. On a multitasking system running the Multifinder, two or more startup applications can be designated, again through the Set



Star network.

Startup command on the Finder's Special menu.

STARTUP.CMD A special-purpose batch file stored in the root directory of the startup disk in OS/2. STARTUP.CMD can contain commands for initializing (tailoring) the system to the user's needs or requirements. It is the OS/2 equivalent of an MS-DOS AUTOEXEC.BAT file.

startup ROM The bootstrap instructions coded into a computer's ROM (read-only memory) and executed at startup. The startup ROM routines enable a computer to check itself and its devices (such as the keyboard and disk drives), prepare itself for operation, and run a short program to load an operating-system loader program from disk. *See also* bootstrap, power-on self test.

state *See* status.

statement The smallest executable entity within a programming language. In general, each line of a program is an individual statement and is considered an individual instruction. Not all languages define a statement in the same way, but most popular ones support the concepts of assignment statements, control statements, comment statements, and so on.

state-of-the-art Up to date; at the forefront of current hardware or software technology.

static In communications, a crackling noise caused by electrical interference with a transmitted signal. In information processing, *static* means fixed, predetermined, not fluctuating with time or situation. For example, a static memory buffer is a p